

Preparation of olefin copolymers of sulfur dioxide or carbon monoxide

Description of Technology: The invention generally relates to copolymers of sulfur dioxide and/or carbon monoxide with olefins which may be prepared by contacting the appropriate monomers with a combination of a selected strong Lewis acid and a selected metal or metal compound.

Patent Listing:

1. **US Patent No. 6,037,442**, Issued March 14, 2000, "Preparation of olefin copolymer of sulfur dioxide or carbon monoxide"

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Market Potential: Olefin copolymers of sulfur dioxide or carbon monoxide often have certain desirable features, such as good thermal stability and good resistance to certain organic liquids, and high melting points which makes them useful as molding resins. Of special interest are the ethylene copolymers, which can be relatively easily made. These polymers are often made by contacting the monomers with a catalyst system which includes a specified type of transition metal compound. However, these transition metal compounds are often quite expensive.

Benefits:

- Good thermal stability
- High melting points

Applications:

• Copolymers of sulfur dioxide